

**AMD Treatment System Form for Datashed  
 AML/AMD Remediation Projects**

Project Name: SR81 (Slippery Rock Passive Treatment Rehab & Maintenance) AMLIS #: PA 7131 & 7134  
 Latitude: 41.099932 Longitude: -79.85906 Determined by GPS? Y  N   
 Watershed Name: Slippery Rock Creek Receiving Stream: Slippery Rock Creek  
 USGS Quadrangle: Hilliards, PA County: Butler  
 Township/City: Washington Township

Contact Person/Organization:							
<b>Name:</b>				<b>Address:</b>			
Cliff Denholm/Stream Restoration Incorporated				PO Box 837			
<b>Telephone Number + Area Code:</b>							
(724)-279-5080							
<b>Email Address:</b>							
sri@streamrestorationinc.org							
Organization responsible for operation/maintenance of project if different than above:							
<b>Name:</b>				<b>Address:</b>			
<b>Telephone Number + Area Code:</b>							
<b>Email Address:</b>							
Source of AMD:							
Underground	<input checked="" type="checkbox"/>	Surface	<input type="checkbox"/>	Refuse	<input type="checkbox"/>	Oil-Gas well	<input type="checkbox"/>
Treatment System Information:							
<b>Year Re-Constructed:</b>	2023			<b>Total Capital Cost:</b>	\$ 249,348		
<b>Was this a Rehabilitation Project?</b>	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	<b>Date of Original System:</b>	2002	<b>Costs Of Rehabilitation:</b>	\$ 339,948.10	
<b>Describe Rehabilitation Activities:</b> See as-built plan and final report on Datashed for additional detail. The system was expanded by adding an additional anoxic limestone drain and lengthening the existing aerobic wetland. A z-pile moat was constructed to convey water from the constructed wetland to the natural wetland while promoting settling of solids. Part of the natural wetland is utilized for oxidation/removal of metals, so a rock distribution berm was added to the middle of the wetland to spread flow.							

If this project includes land reclamation as more than 50% of the total cost, what is the estimated cost of the land reclamation? \$ \_\_\_\_\_

Primary Funding Partners and Funding Provided				
Source		Amount		
Title IV, Appalachian Clean Streams				
PADEP Growing Greener		\$215,251.44		
PADEP Other				
PADCNR				
AMD Set Aside Funds				
EPA Section 319				
OSM Watershed Cooperative Assistance Program		\$63,796.73		
NRCS				
EPA Watershed Protection				
USCOE				
University				
Bond Forfeiture				
Reclamation in Lieu of Penalty				
Consent Order				
Foundation for PA Watersheds		\$7,500		
Private/Foundation				
In-kind Contributions		\$53,399.93		
Other Funding Partner (Please note)				
Treatment Technology: Select all that apply at the site.				
Treatment System	# of Treatment Cells	Contain Siphon Automatic Flushing		Comments
		Y	N	
<b>Typical methods</b>		<input type="checkbox"/>	<input type="checkbox"/>	
Aerobic Wetland	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	One aerobic wetland is constructed and was expanded in the rehab project. The other wetland is a natural existing wetland. See As-built
Anaerobic Wetland		<input type="checkbox"/>	<input type="checkbox"/>	
ALD	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ALD1 (1,286 tons limestone after rehab) was present prior to reconstruction, while ALD2 (2,576 tons limestone) was installed during rehabilitation.
Limestone Sand Dosing		<input type="checkbox"/>	<input type="checkbox"/>	
Diversion Well/Mechanical Limestone Addition		<input type="checkbox"/>	<input type="checkbox"/>	
Oxic Limestone Drain (OLD)		<input type="checkbox"/>	<input type="checkbox"/>	
Oxic Limestone Channel (OLC)		<input type="checkbox"/>	<input type="checkbox"/>	
Low pH Fe Oxidation Channel		<input type="checkbox"/>	<input type="checkbox"/>	
Limestone Pond (Specify UP, DF or HF under comments)		<input type="checkbox"/>	<input type="checkbox"/>	
SAP (Specify UP, DF or HF under comments)		<input type="checkbox"/>	<input type="checkbox"/>	
Bio-Reactor (Specify UP, DF or HF under comments)		<input type="checkbox"/>	<input type="checkbox"/>	
VFP (Specify UP, DF or HF under comments)		<input type="checkbox"/>	<input type="checkbox"/>	
Manganese Removal Bed		<input type="checkbox"/>	<input type="checkbox"/>	
Pyrolusite Bed		<input type="checkbox"/>	<input type="checkbox"/>	
Settling/oxidation Pond	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Part of the settling pond was converted into the new anoxic limestone drain (ALD).

UF = Upflow

DF = Downflow (like in a traditional SAP)

HF = Horizontal Flow

Other Methods	Comments
Well Plugging	
Steel Slag	
Land Reclamation to cover toxic material or prevent water infiltration.	
In-Situ Treatment <i>(Include type under comments)</i>	
Chemical Addition Treatment Plant <i>(Include Chemical used under comments)</i>	
Lime Doser <i>(Include Chemical used under comments)</i>	
Mechanical Aeration <i>(Include type under comments)</i>	
Others <i>(discuss in comments)</i>	

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Project Designer:			
BioMost, Inc.			
Organization:			Telephone Number + Area Code:
See above.			724-776-0161
Water Information:			
	Inflow (ALD)	Outflow (NWL)	Load Reductions (lbs/day)
Flow (gpm)	See Datashed	See Datashed	See Datashed
pH			
Total Iron (mg/L)			
Ferrous Iron (mg/L)			
Hot Acidity (mg/L)			
Alkalinity (mg/L)			
Total Aluminum (mg/L)			
Total Manganese (mg/L)			
Date of Collection			

If more detailed water quantity and quality data is available, please provide the following:	
Contact:	Uploaded to datashed.org
Telephone:	
Email:	

If receiving stream or macroinvertebrate information is available please provide the following:		
Contact:		
Telephone:		
Email:		
<b>Comments:</b> <i>(specific to O&amp;M; performance; impact on receiving stream. Include date of inspection and name and telephone number of person making comment)</i>		
Date	Name	Telephone Number + Area Code
<b>Comment:</b> <u>As-Builts and OM&amp;R Plan posted on <a href="http://www.datashed.org">www.datashed.org</a></u>		

Any links specific to this watershed that should be included?	
Web Address	See Datashed.

Send to your DEP Project Advisor with your Final Report Paperwork: One digital copy of the AMD Treatment System Form for Datashed, the Operational, Maintenance and Repair/Replacement (O, M & R) Plan that includes the “as-built” drawings and site schematics in PDF, and any water quality information in EXCEL format.